APPENDIX C
RAIL OPERATIONS

C.1 INTRODUCTION

This appendix describes SEA's data collection and analysis of rail operations in the area affected by the Proposed Action and Alternatives. This appendix provides an analysis of the train traffic within the Bayport Loop and the traffic that BNSF projects that it would capture. It explains how SEA estimated the current average number of trains per day for each of the affected rail lines and the average train lengths. The existing average daily train traffic and train length are also used in the analysis of hazardous materials transportation, grade crossing delay and safety, pipeline safety, and noise. The appendix explains how SEA assessed the effects of adding two additional trains to these lines. In addition, this appendix includes the two legal agreements prohibiting PTRA from accessing the Bayport Loop or allowing others to access the Bayport Loop from PTRA tracks and a November 7, 2002 letter from UP which describes the existing rail operations in the Houston area.

C.2 ANALYSIS OF TRAFFIC GENERATED BY THE BAYPORT LOOP

To verify BNSF's traffic projections, SEA utilized the Board's waybill sample. The waybill sample is an annual sample of freight movements that originate and terminate on railroads in the U.S. The waybill sample data show the number of carloads per day that originated or terminated from a certain point on the rail network. A carload is defined as a loaded rail car containing a product. Because the waybill only accounts for loaded rail cars, it can be reasonably assumed that an equal number of empty rail cars also pass through the same point each day. Table C-1 shows the waybill sample data for carloads originating and terminating in the Bayport Loop. Table C-1 separates carloads into hazardous and non-hazardous categories and shows the average number of carloads originating or terminating in the Loop each day, based on 365 days of operations per year. This information is provided for the most recent years available:[1] 1998, 1999, and 2000. The waybill sample data show that the Applicants' projections of capturing between 36 and 66 carloads per day is reasonable because that would equal between 28 and 51 percent of the total Bayport Loop traffic.

In addition, UP provided, in its November 7, 2002 letter, information on the number of rail cars that it handled on the Bayport Loop between 1999 and mid-2002. This information is shown in Table C-2. UP developed this information using internal UP transportation data and the Board's waybill sample. Note that the information in Table C-1, showing the Board's waybill sample data, includes only loaded cars.

The data supplied by UP show a slightly higher daily average number of rail cars originating and terminating in the Bayport Loop than the Board's waybill sample data. Using UP's data, the Applicants would still need to operate only two trains per day, on average, to accommodate up to 50 percent of the Bayport Loop rail traffic, if they were to capture this share of the traffic. Using

[1] At the time the analysis was initiated.

Table C-1
Bayport Loop Waybill Sample Data

Year	2000	1999	1998
ORIGINATING CARLOADS			
Annual Non-Hazmat	27,900	28,076	21,256
Annual Hazmat	5,360	7,020	8,680
Annual Total	33,260	35,096	29,936
Average Total Carloads per Day	91	96	82
Average Hazmat Carloads per Day	15	19	24
Percent Hazmat	16%	20%	29%
TERMINATING CARLOADS			
Annual Non-Hazmat*	9,872	9,664	11,844
Annual Hazmat	3,960	2,360	320
Annual Total	13,832	12,024	12,164
Average Total Carloads per Day	38	33	33
Average Hazmat Carloads per Day	11	6	1
Percent Hazmat	29%	20%	3%
TOTAL CARLOADS			
Annual Non-Hazmat	37,772	37,740	33,100
Annual Hazmat	9,320	9,380	9,000
Annual Total	47,092	47,120	42,100
Average Total Carloads per Day	129	129	115
Average Hazmat Carloads per Day	26	26	25
Percent Hazmat	20%	20%	21%

* USDOT does not classify glycols as hazardous material. The Applicants added 2,500 carloads of glycols to their hazardous materials estimate because USEPA classifies glycols as hazardous material. The 2,500 carloads of glycols are not part of the hazardous materials carloads in the Waybill sample because of USDOT's classification system.

Table C-2
UP Bayport Loop Rail Car Data

Year	Total Rail Cars per Year (Loaded and Empty)	Total Rail Cars per year (Loaded)*	Average Daily Rail Cars (Loaded and Empty)	Average Daily Rail Cars (Loaded)*
1999	108,586	54,293	297	149
2000	110,275	55,138	301	151
2001	104,575	52,288	287	144
First Half 2002	56,146	28,073	310	155

* SEA derived these loaded rail car estimates by dividing the number of loaded and empty rail cars, supplied by UP, by two. This enables comparison with the waybill sample data in Table C-1.

the data in Table C-2 for the first half of 2002, a potential 50 percent share of the business for the Applicants would equate to an average of two trains per day with an average of 78 rail cars each.

C.3 ESTIMATING THE AVERAGE DAILY TRAIN TRAFFIC ON AFFECTED RAIL LINES

Information on average train traffic for the affected rail lines provides an important baseline input for SEA's analysis. During the scoping period for the Draft EIS and in the course of its analysis, SEA relied on several sources of information on daily train traffic on the rail lines affected by the Proposed Action and Alternatives. SEA also conducted several field trips to the project area to count rail traffic.

SEA reviewed information filed by both BNSF and UP on rail operations, the Board's waybill sample for the Bayport Loop, TxDOT data, FRA data, the UP/SP merger operating plan, a commodity flow study prepared by the Deer Park Local Emergency Planning Committee, and the Shoal Point Container Terminal EIS. These data sources are described in more detail in Section C.3.2. The train traffic information provided by these sources indicated a range of traffic volumes on any given line. Indeed, the range of train traffic volume illustrates the fluctuations in daily traffic operating in the Houston area and indicates that rail traffic does not remain constant over time. Rail lines around Houston experience fluctuations averaging several trains a day due to dispatching priorities, line and signal system maintenance, and rail congestion. Differences in annual data are attributable to differing methods of data collection and submission, as well as fluctuations in traffic flows caused by economic conditions, seasonal commodity flows, and contract awards to other railroads.

Because of the complexity of the Houston area, SEA had difficulty determining the routing of the existing UP Bayport Loop traffic for the purpose of establishing the No-Action Alternative. Therefore, SEA wrote to UP, the owner of the affected rail lines, in a letter dated September 6, 2002, with a request to provide rail operations information. (UP's November 7, 2002, letter responding to this request is attached to this Appendix.) SEA also took the opportunity to ask for rail traffic data on all of the lines affected by the Proposed Action and Alternatives. UP

responded with a concerted, time consuming effort to determine representative rail operations data and provided operational data from May 2002 for the affected rail lines. UP was unable to fulfill all of SEA's data request because it does not maintain data in all of the categories for all of the lines. To compile the information, UP used Automatic Equipment Identification (AEI) readers and Computer Aided Dispatching (CAD) sources or estimates by railroad transportation managers for train movements that are regularly scheduled over a segment. UP stated that the May 2002 data were representative of current rail operations in the Houston area. UP also indicated that their May 2002 information is more specific than the information that they supply to FAA and TxDOT, because UP took extra steps to compile the May information for specific segments. Using that level of effort on a state-wide or national basis to compile information for TxDOT and FRA would be impracticable. SEA verified UP's data through comparison with the other data sources and through discussions with BNSF and PTRA.

SEA decided to use the UP May 2002 rail operations data as the baseline for its analysis in the Draft EIS. UP was unable to provide the average number of rail cars per train for several segments. SEA used a combination of best professional judgment, and BNSF and PTRA information to fill the gaps in UP's data. Where the data concerned BNSF or PTRA trains, SEA obtained information directly from those railroads. Where the data were unavailable for UP trains, SEA used best professional judgment, based on UP, BNSF, and PTRA data for surrounding rail lines and likely destinations of trains to select an appropriate average number of rail cars per train.

The values for the average number of hazardous materials cars per train, presented in Table C-3 include loaded and empty railcars. DOT regulations establish that a railcar that is used for transportation of hazardous materials is considered as a hazardous materials container even when it is empty, unless it has been cleaned in accordance with the respective DOT standards. Therefore, the railroads typically include both loaded and empty railcars in their statistics of hazardous materials railcars.

SEA obtained information regarding the quantities of hazardous materials transported along the different segments considered under the Proposed Action and Alternatives from several sources in addition to the information supplied by UP. The Applicants indicated that an average of 21 percent of all the cars in BNSF trains in the Houston area are used to transport hazardous materials. The Applicants also indicated that approximately 58 percent of those hazardous materials railcars are empty. SEA assumed that for all non-BNSF trains, approximately 50 percent of all hazardous materials railcars are empty. UP provided information on the average number of hazardous materials railcars per train for the Bayport Industrial Lead, the Strang Subdivision, and the GH&H Subdivision between Graham Siding and Tower 30. For the remaining UP segments subject to analysis, SEA assumed that the average number of hazardous materials railcars per train was proportional to the weighted average percentage of hazardous materials railcars determined based on the information provided by UP for the Strang Subdivision and the GH&H Subdivision. For the PTRA trains that travel parallel to the Strang Subdivision and share segments of track, SEA assumed that the average number of hazardous materials railcars per train was proportional to the average percentage of hazardous materials railcars for the UP and BNSF trains traveling along the Strang Subdivision. For the Tex Mex Beaumont to Laredo train traveling along the Terminal and Lafayette Subdivisions, SEA

Table C-3
Baseline Rail Operations Data Used in Draft EIS

Rail Line Segment	Average Number of Trains Per Day		Average Number of Rail Cars Per Train (Loaded and Empty)	Average Number of HazMat Cars Per Train (Loaded and Empty)	Train Length - Feet (Based on two 70' Locomotives and 65' Cars)
Bayport Loop - South End	UP	7.4	21.7	5	1,551
	UP Local	3.1	21.7	5	1,551
	Total/Weighted Average	10.5	21.7	5	1,551
Bayport Loop - North End	UP	7.4	43.4	10	2,961
	UP Local	3.1	21.7	5	1,551
	Total/Weighted Average	10.5	37	8.5	2,545
Bayport Industrial Lead (Strang Yard to North End of Bayport Loop)	UP	7.4	43.4	10	2,961
Strang Sub. (Strang Yard to Pasadena Junction)	UP	7.8	42.3	15	2,890
	BNSF	0.3	30.5	6.4	2,123
	PTRA	4	30	8.5	2,090
	Total/Weighted Average	12.1	37.9	12.4	2,606
Strang Sub. (Pasadena Junction to Sinco Junction)	UP	7.8	42.3	15	2,890
	BNSF	5.3	30.5	6.4	2,123
	PTRA	7	47.9	13.5	3,251
	Total/Weighted Average	20.1	41.1	12	2,813
Strang Sub. (Sinco Junction to Tower 30)	UP	7.8	42.3	15	2,890
	BNSF	5.3	30.5	6.4	2,123
	PTRA	0	0	0	0
	Total/Weighted Average	13.1	37.5	11.1	2,579
GH&H Line (Graham Siding to Tower 30)	UP	3.4	53.5	9.5	3,618
GH&H Line (Tower 30 to Tower 85)	UP	4.1	53.5	16.1	3,618
	BNSF	0.9	70	14.7	4,690
	Total/Weighted Average	5	56.5	16.1	3,811
East Belt (Tower 85 to Tower 87)	UP	14.8	53.5	16.1	3,618
	BNSF	10.3	53.5	11.2	3,618
	Total/Weighted Average	25.1	53.5	14.1	3618

Table C-3 (continued)
Baseline Rail Operations Data Used in Draft EIS

Rail Line Segment	Average Number of Trains Per Day		Average Number of Rail Cars Per Train (Loaded and Empty)	Average Number of HazMat Cars Per Train (Loaded and Empty)	Train Length - Feet (Based on two 70' Locomotives and 65' Cars)
Terminal Sub (Tower 87 to Dawes)	UP (includes 0.9 AMTRAK)	14.9	66.3	20.9	4,450
	Foreign Freight	5.8	53.1	11.2	3,592
	Total/Weighted Average	20.7	62.6	17.9	4,209
Lafayette Sub. (Dawes to Dayton Junction)	UP (includes 0.9 AMTRAK)	14.9	66.3	20.9	4,450
	Foreign Freight	5.8	53.1	11.2	3,592
	Total/Weighted Average	20.7	62.6	17.9	4,209
Baytown Sub. (Dayton Junction to CMC Plastics Storage Yard)	UP	7.7	36.7	11	2,526
	BNSF	7.2	36.7	7.7	2,526
	Total/Weighted Average	14.9	36.7	9.4	2,526

assumed that the average number of hazardous materials railcars was the same as for the BNSF trains that travel along those segments. The AMTRAK trains that travel along the Terminal & Lafayette Subdivisions do not transport hazardous materials railcars. SEA determined the value for the average number of hazardous materials railcars per train for the UP trains that travel along the Terminal and Lafayette subdivisions presented in Table C-3 based only on the UP trains that travel along those segments. SEA assumed that the AMTRAK trains have an average of 16 railcars, including two locomotives. For the purposes of the hazardous materials transportation safety analysis presented in Sections 3.2 and 4.2, as well as in Appendix D of this document, SEA determined an adjusted average number of railcars, excluding the shorter AMTRAK train (e.g., SEA used a value of 69.5 railcars per train in the hazardous materials transportation analysis, instead of value of 66.3 railcars per train presented in Table C-3).

Table C-3 shows the rail operations data that SEA used for analysis in the Draft EIS.

C.3.1 Development of Average Train Length

Trains are composed of locomotives and rail cars. For the purposes of the analyses, SEA assumed that existing trains in the Houston area operate on average with two locomotives based on field observations and that many trains are locals. The typical length of a locomotive is 70 feet. The length of rail cars varies, depending on materials they are designed to carry. Tank cars range from 45 to 55 feet, hopper cars from 60 to 62 feet, freight cars from 50 to 74 feet, and cement cars approximately 40 feet or less. All of these types of rail cars are found in the Houston area. SEA selected an average rail car length of 65 feet for use in its analyses. Given the mix of cars in the Houston area, this is seen as a conservative approximation, which may slightly overstate the true average length.

For the purposes of various analyses, SEA used the data on the average number of rail cars per train for each line that was provided by UP in its November 7, 2002 letter. Where UP did not have data on the average number of cars per train, SEA used a combination of other data sources and best professional judgment to determine the average number of cars.

Average Train Length = (Average Number of Rail Cars x 65 feet) + (Two Locomotives x 70 feet)

The average number of rail cars per train varies for the different rail lines affected by the Proposed Action and Alternatives. Therefore, the average train length also varies for each rail line.

C.3.2 Other Sources of Rail Operations Data

SEA collected train traffic data from the FRA and TxDOT, which maintain information on train movements over grade crossings. These data are periodically updated, through submittals from the railroads. Railroads send updates on a quarterly and annual basis. UP submits information based on the maximum number of movements of a week over a segment of track for all its grade crossings rather than an average number, unless a specific analysis of an individual grade crossing has occurred. The age of the data in the FRA database varies and the train numbers presented below represent more recent entries, although some date to 1999 and earlier. Train traffic numbers derived from the FRA database are presented in Table C-4.

SEA also collected train traffic information from TxDOT. TxDOT receives data from the FRA and the railroads. These data show daily train counts on rail lines with grade crossings. The data may contain an average of several years of train traffic information. As with the FRA data, the railroads may supply specific information about train movements over a particular grade crossing, when requested by TxDOT. Train traffic numbers derived from TxDOT are also presented in Table C-4.

Rail Traffic Counts in Field

SEA conducted several field trips to the project area to count trains over a series of 24 hour periods on the existing rail lines that would be affected by the Proposed Action and Alternatives. Between March 12 and 16, 2002 and between April 2 and 4, 2002, SEA performed monitoring of the rail operations along the UP GH&H line and the UP Strang Subdivision. The purpose for the monitoring was to establish a sample of the current level of traffic moving over portions of the Build Alternatives, the No-Build Alternative, and the No-Action Alternative. The results represent selected operations at a given point in time and, though not intended to be comprehensive, provide an indication of current train movements. Teams consisted of five to six people.

Table C-4
Daily Train Counts

	Data Sources					
	UP[1]	**UP[2]**	**FRA[3]**	**TxDOT[4]**	**SEA[5]**	**Shoal Point DEIS**
Bayport Industrial Lead	7.4	--	14	--	--	
Strang Subdivision (Strang Yard to Pasadena Junction)	12.1	--	12	4-13	--	
Strang Subdivision (Pasadena Junction to Sinco Junction)	20.1	--	20	--	19	
Strang Subdivision (Sinco Junction to Tower 30)	13.1	--	14	4-27	--	
GH&H Line (Graham Siding to Tower 30)	3.4	8-9	4	4-7	5.5	8
GH&H Line (Tower 30 to Tower 85)	5	--	4	2-10	--	8
East Belt (Tower 85 to Tower 87)	25.1	--	27	9-34	--	
Terminal Subdivision (Tower 87 to Dawes)	20.7	--	16	--	--	
Lafayette Subdivision (Dawes to Dayton Junction)	20.7	--	16	--	--	
Baytown Subdivision (Dayton Junction to CMC Plastics Storage Yard)	14.9	--	--	--	--	

[1] Letter from UP to SEA dated November 7, 2002.

[2] UP filing before the Board, FD No. 34079, October 9, 2001.

[3] FRA grade crossing database. Includes counts for day and night trains and switching.

[4] Based on inventory or AEI scanning data for selected locations. Presented as a range because some count information includes trains only while other information also includes switching.

[5] SEA field work.

The two lines that were monitored were:

1) the UP GH&H line (as part of the Build Alternatives), and

2) the UP Strang Subdivision (as part of the No-Build and No-Action Alternatives) along with the Manchester and Pasadena Subdivisions of the Port Terminal Railroad Association (PTRA).

Approach and Methodology for Rail Traffic Counts in Field

The approach and methodology utilized by the rail operations monitoring team involved monitoring each of the designated lines for two periods of 24 hours. A pre-printed form was

used to record all train movements by line during the monitoring period. The following data were collected, whenever possible, for each movement:

- Time;
- Train Owner (BNSF, UP, or PTRA);
- Train Identification (usually the number of the lead locomotive);
- Train Type (mixed freight, intermodal, local, switching, light engine – engines without cars, etc.);
- Direction (railroad direction rather than compass direction);
- Route (through movement over the same line or the movement from one line to another);
- Total Cars (the number of cars in the train);
- Hazardous Materials Cars (the number of cars placarded for hazardous materials in the train);
- Number of Locomotives (the number of engines, or locomotives, on the train); and
- Remarks (highway grade crossing blockage time and other pertinent notes).

The team did not expect to collect all of the data for every train on every line given the monitoring conditions and the variety of railroad operations that were expected. Monitoring was conducted from public property, which made night monitoring more difficult. The criteria for selecting monitoring locations included the safety of the team. Because the Strang/Pasadena line monitoring was conducted from some distance away from the tracks, several trains were video taped during daylight hours in order to allow counting of hazardous materials cars at a later time. The initial briefing for each of the team members stressed accurate counting of the number of train movements as the top priority.

During the monitoring of the GH&H line during March 12 and 16, 2002, the team noted that track maintenance work was being performed at Tower 30 on the turnouts to the GH&H as well as along the south end of the line. Difficulty was also noted regarding the counting of hazardous materials cars due to the train speed at the monitoring location. Based upon the results of the initial monitoring of the GH&H line, a subsequent monitoring session was conducted between April 2 and 4, 2002, during similar days of the week.

The four railroad lines were monitored on the following schedule:

<u>GH&H Initial Monitoring</u>

5:00 pm on 3/12/02 to 5:00 pm on 3/13/02 and
8:30 pm on 3/14/02 to 8:30 pm on 3/15/02

<u>GH&H Subsequent Monitoring</u>

3:00 pm on 4/2/02 to 3:00 pm on 4/3/02 and
3:00 pm on 4/3/02 to 3:00 pm on 4/4/02

Strang/Pasadena

2:00 pm on 3/12/02 to 2:00 pm on 3/13/02 and
11:30 pm on 3/15/02 to 11:30 pm on 3/16/02

Based upon the sample data collected during the monitoring of train operations, a summary of the results is shown in Table C-5. The discussion below describes the results.

GH&H (Initial Monitoring):

Traffic involved 5 UP trains during one 24-hour period and 4 UP trains during the next 24-hour period for an overall average of 4.5 trains per day. The average number of cars per train was 60. Cars containing hazardous materials averaged 21 cars, or 35 percent, per train, based upon the second monitoring period only.

GH&H (Subsequent Monitoring):

Traffic involved 9 UP trains during one 24-hour period and 4 UP trains during the next 24-hour period for an overall average of 6.5 trains per day. The average number of cars per train was 43. Cars containing hazardous materials averaged 12 cars per train, or 28 percent.

Strang Subdivision:

A total of 44 trains were identified during the two periods for an average of 22 trains per day. Of the total, 13 were BNSF, 14 were UP, 11 were PTRA, and 6 trains at night could not be positively identified. The number of cars per train were counted on a total of 37 trains. The average number of cars per train was 58. The number of hazardous materials cars per train were counted on a total of 23 trains. For these 23 trains, the average number of hazardous materials cars was 22 per train, or 38 percent.

C.3.3 Assessment of Capacity

SEA considered a number of factors in assessing how an increase of two trains per day would affect rail line capacity. The capacity of a rail line depends upon the track or tracks, track speed, dispatchers, train crews, junctions, and other outside influences. Theoretically, trains could be operated all day long with separation for safe braking distance. Practically, trains are not run that way. For example, there are single track lines with CTC signaling and passing sidings at 10- to 20-mile intervals that handle 25 to 30 trains per day. Based on best professional judgment, a single track can handle 18 to 20 trains per day without signaling and 25 to 30 with CTC. Double track with CTC can handle 70 to 80 trains per day. The capacity of each line is based upon actual operations, which are tempered by existing conditions.

Table C-5
SEA Field Traffic Count Results

Rail Line	24 Hour Period	Number of Trains	Train Owner	Total Cars	Hazmat Carloads	Average Cars per Train	Average Hazmat Carloads per Train	% Hazmat per Train	Other Train Movements
GH&H	3/12/02 - 3/13/02	**5**	**UP**	**301**	**N/A**	**60**	**N/A**	**N/A**	**3**
GH&H	3/14/02 - 3/15/02	**4**	**UP**	**235**	**83**	**59**	**21**	**35%**	**1**
GH&H	4/2/02 - 4/3/02	**9**	**UP**	**331**	**50**	**37**	**6**	**15%**	**0**
GH&H	4/3/02 - 4/4/02	**4**	**UP**	**226**	**104**	**57**	**26**	**46%**	**0**
Strang Subdivision	3/12/02 - 3/13/02	5	BNSF	255	63	51	13	25%	2
		5	UP	265	66	53	13	25%	4
		3	PTRA	174	57	58	19	33%	2
		7*	Various	N/A	N/A	N/A	N/A	N/A	N/A
Strang Subdivision Total		**20**		**694**	**186**	**53**	**14**	**27%**	**8**
Strang Subdivision	3/15/02 - 3/16/02	3	BNSF	198	104	66	35	53%	4
		4	UP	253	122	63	31	48%	1
		3	PTRA	177	85	59	28	48%	3
		14**	Various	837	N/A	60	N/A	N/A	N/A
Strang Subdivision Total		**24**		**1465**	**311**	**61**	**31**	**50%**	**8**

* Unable to obtain cars and hazmat cars per train for these seven trains and, therefore, they were not included in the calculations of average cars per train and average hazmat carloads. They included one BNSF, one UP, two PTRA, and three unidentified trains.

** Unable to obtain hazmat carload counts for these 14 trains and, therefore, they were not included in the calculation of average hazmat carloads. They included four BNSF, four UP, three PTRA, and three unidentified trains. These 14 trains had a total of 837 cars.

Settlement Agreement Among UP, SP, and PHA Regarding Construction of Track in Rights-of-Way of LaPorte Line and Bayport Line November 10, 1995.

PORT OF HOUSTON AUTHORITY

EXECUTIVE OFFICES: 111 East Loop North • P.O. BOX 2562 • HOUSTON, TEXAS 77252-2562
TELEPHONE: (713) 670-2400
FAX: (713) 670-2429

NED S. HOLMES
Chairman

November 10, 1995

James Dolan, Esq.
Vice President - Law
Union Pacific Railroad Company
1416 Dodge Street
Omaha, Nebraska 68179

Mr. John T. Gray
Vice President - Network and
Corporate Development Southern Pacific Lines
1860 Lincoln Street
Denver, CO 80295

Re: Finance Docket No. 32760, Union Pacific Corp., Union Pacific R.R. and Missouri Pacific R.R. -- Control and Merger Southern Pacific-Rail Corp., Southern Pacific Transp. Co., St. Louis Southwestern Railway Co., SPCSL Corp. and the Denver and Rio Grande Western Railroad

Dear Messrs. Dolan and Gray:

This is to confirm the terms of an agreement ("the Agreement") reached by the Primary Applicants in the above-captioned proceeding, Union Pacific Corporation, Union Pacific Railroad Missouri Pacific Railroad, (collectively, "UP") and Southern Pacific Rail Corporation, Southern Pacific Transportation Company, St. Louis Southwestern Railway, SPCSL Corporation, and the Denver and Rio Grande Western Railroad (collectively, "SP"), on the one hand, and the Port of Houston Authority ("PHA"), on the other hand, concerning the proposed merger of UP and SP.

Contingent upon consummation of the above-captioned merger, the parties agree to the following terms:

HJM\S695\S695-53.07C/dlm

1. Access to a portion of SP's La Porte Line:

   A. PHA shall have the right to construct a track on the right-of-way of the current SP La Porte Line from Deer Park Junction to the junction with the Houston Lighting and Power Company ("HL&P") Lead east of SP's Strang Yard in La Porte, Texas, termed "New Track 1" hereinafter. Provisions regarding ownership, construction and use of New Track 1 are set forth in paragraph 3. herein.

2. Access to Planned Bayport Container Terminal.

   A. PHA shall have the right to construct a track on the right-of-way of the current SP Bayport Line from a junction with the SP La Porte Line west of Strang Yard to the planned PHA terminal at Bayport, termed "New Track 2" hereinafter. Provisions regarding ownership, construction and use of New Track 2 are set forth in paragraph 3 herein.

3. Ownership, Construction and Use of New Tracks 1 and 2.

   A. Primary Applicants shall have reasonable access to the New Tracks 1 and 2 when they are not needed for the operations of PHA (or, if PHA so designates from time to time, Port Terminal Railroad Association ("PTRA")). Primary Applicants shall dispatch the New Tracks 1 and 2 and PHA (or, if PHA so designates from time to time, PTRA) will have priority.

B. PHA shall have no land ownership rights. Rather, PHA shall own the New Tracks 1 and 2 and PTRA shall have suitable trackage rights from Primary Applicants and PHA to operate over the New Tracks 1 and 2 and right-of-way. These trackage rights shall reserve for Primary Applicants the right to use the New Tracks 1 and 2, subject to PHA's priority. PHA shall have no right to build any additional track springing from or connecting to the New Tracks 1 or 2, except the connections to the expanded intermodal ramp at Barbours Cut, the connections to the planned Bayport Terminal, and other connections as may be subsequently agreed between Primary Applicants and PHA.

C. Only Primary Applicants, PHA and PTRA (but not its other members) shall have access over the New Tracks 1 and 2.

D. Primary Applicants shall coordinate with PHA to review final engineering for the New Tracks 1 and 2 and the final plans and engineering detail shall be subject to approval by Primary Applicants prior to construction, such approval not to be unreasonably withheld.

E. PHA shall construct the new Tracks 1 and 2 and its contractors shall enter into the merged carrier's standard right of entry agreements and carry the merged carrier's normal minimum amounts of insurance.

F. Primary Applicants and PTRA shall share maintenance expense and all risk of loss associated with the New

Tracks 1 and 2 in the same manner as set forth in existing agreements between SP and PTRA.

G. It is understood the New Tracks 1 and 2 shall be located so as to minimize disruption of Primary Applicants' operations in the area and PHA agrees to construct necessary power crossover switches to accomplish this result and to relocate the existing railroad scale, if necessary. The actual location of New Tracks 1 and 2 and necessary crossover switches and signals and any junction signals or switches shall be determined at the sole discretion of Primary Applicants, but New Tracks 1 and 2 shall be located within the existing right-of-way of Primary Applicants whenever practicable.

H. The New Track 1 shall be used by PHA and PTRA only for the purpose of moving freight to and from New Track 2, PHA's Barbours Cut Terminal or its other property which the PTRA or PHA may have the right to serve under prior trackage rights granted by SP.

I. The New Track 2 shall be used by PHA and PTRA only for the purpose of moving freight to and from the planned PHA's Bayport Terminal. Neither PTRA nor PHA shall have any right to serve existing or future industries on either Primary Applicants' Bayport Loop or adjacent to other right-of-way of Primary Applicants. PHA expressly agrees that the foregoing provision is of paramount importance to this agreement and that any attempt by PHA to establish rail service to others springing from New

Track 2 shall void all other rights granted herein including the right to operate over the right-of-way of Primary Applicants and any operating rights which may be granted to PTRA or PHA by subsequent agreements whose purpose is to implement this letter agreement.

J. It is understood that PHA shall pay all costs and Primary Applicants shall bear no cost associated with New Tracks 1 and 2, but Primary Applicants shall cooperate with PHA in making available to it all pertinent pipeline right-of-way agreements, utility agreements, roadway agreements, etc.

4. With respect to the trackage rights provided for in this Agreement, the parties shall negotiate in good faith to agree in an expeditious and timely manner on definitive trackage rights agreements which generally conform to industry standards prior to beginning PTRA or Primary Applicants' operations over either New Track 1 or 2.

5. Primary Applicants shall establish and maintain a reciprocal switch charge assessed on cars handled into or out of the facilities of Woodhouse Terminal in Galena Park, Texas, other than Houston Public Grain Elevator No. 2 ("HPGE2"), at a level equal to 123% of the previous 5 calendar year average of the PTRA's average cost per car handled.

7. Primary Applicants agree that if following consummation of the merger, Primary Applicants use the new connection to be constructed by PHA between the HB&T and SP at Tower 86 for the

movement of traffic other than grain traffic, Primary Applicants shall reimburse PHA for up to one-half the cost of construction of such connection, based on a car-count proportion of usage by Primary Applicants during the three-year period following the first use of the connection, and Primary Applicants and PHA shall share maintenance expense and all risk of loss associated with such new connection in the same manner as set forth in existing agreements between SP and PTRA.

8. PHA agrees that, upon the signing of this Agreement, it shall file a verified statement with the ICC in its Finance Docket No. 32760, signed by Chairman Ned Holmes on behalf of the PHA and the Port of Houston Commission, supporting the application filed by Primary Applicants for control and merger authority.

9. This Agreement is intended to establish a binding contract between the parties. Time is of the essence in this contract.

10. This Agreement shall be interpreted under the laws of the State of Texas.

11. This Agreement may be executed in more than one counterpart, including facsimile transmissions, each of which shall be deemed an original.

Sincerely,

For Port of Houston Authority

HLM\S695\S695-53.07C/dlm

Accepted and agreed upon by:

Attorney for Union Pacific Corporation, Union Pacific Railroad Company and Missouri Pacific Railroad Company

Accepted and agreed upon by:

For Southern Pacific Rail Corp., Southern Pacific Transp. Co., St. Louis Southwestern Railway Co., SPCSL Corp. and the Denver and Rio Grande Western Railroad

HLM\S695\S695-53.07C/dlm

Trackage Rights Agreement Between PHA and UP
June 26, 2000

HOUSTON, TEXAS
TRACKAGE RIGHTS AGREEMENT

THIS AGREEMENT made as of this 26th day of June, 2000, by and between UNION PACIFIC RAILROAD COMPANY, a Delaware corporation ("UPRR") formerly known as "SOUTHERN PACIFIC TRANSPORTATION COMPANY" ("SPT") and successor by merger to UNION PACIFIC RAILROAD COMPANY, a Utah corporation ("UP"), on the one hand, and PORT OF HOUSTON AUTHORITY OF HARRIS COUNTY, TEXAS, a governmental agency and body politic of the State of Texas ("PHA").

WITNESSETH:

WHEREAS, UPRR owns a line of railroad consisting of track structure and right of way in Houston, Texas extending between Deer Park Jct., in the vicinity of UPRR's Milepost 14.7, and Barbour's Cut, in the vicinity of UPRR's Milepost 23.9, and extending from such Deer Park to Barbours Cut line to the vicinity of PHA's planned Bayport terminal as shown by dashed line on the attached print identified as Exhibit "A", dated June 5, 2000 (the "UPRR Line"); and

WHEREAS, PHA desires to construct and own three (3) segments of trackage along the UPRR Line: (1) to access a portion of UPRR's La Porte line via the newly constructed track between Deer Park Junction and the junction with the Houston Lighting & Power Company ("HL&P") lead east of UPRR's Strang Yard in La Porte, Texas ("Deer Park Lead"); (2) to access the proposed Bayport terminal (the "Bayport Terminal") via the newly constructed track between a junction with UPRR's La Porte line west of Strang Yard to the Bayport Terminal ("Bayport Lead"); and (3) to improve UPRR's and Port Terminal Railroad Association's ("PTRA") access to Barbours Cut Terminal (the "Barbours Cut Terminal") via the newly constructed track between PHA's Barbours Cut intermodal rail ramp and UPRR's existing HL&P Lead at Strang (hereinafter "Barbours Cut Lead") (identified on Exhibit "A") (the Deer Park Lead, Bayport Lead and Barbours Cut Lead are hereinafter sometimes collectively referred to as the "Joint Trackage"); and

WHEREAS, pursuant to a letter dated September 27, 1995, from John T. Gray to H. T. Kornegay (the "September 27, 1995 Letter"), UPRR, then named "Southern Pacific Transportation Company", outlined its proposal to PHA for the proposed construction by PHA of new track on existing SPT right of way from the Barbours Cut intermodal rail ramp to the intersection with UP's existing HL&P lead at Strang; and

WHEREAS, PHA has selected In-Terminal Services Corporation ("ITS") to act as its operator of the Barbours Cut intermodal rail ramp; and

WHEREAS, pursuant to an agreement dated November 10, 1995 (the "Settlement Agreement"), between PHA, on the one hand, and UPRR, and its predecessors in interest, UP, Missouri Pacific Railroad Company, Southern Pacific Rail Corporation, St. Louis Southwestern Railway, SPCSL Corporation and The Denver and Rio Grande Western Railroad, on the other hand, UP granted PHA authority to construct two (2) tracks on the UP right of way for access by PHA to UP's La Porte line and access to PHA's (1) Barbours Cut Terminal and (2) Bayport Terminal, which rights became effective upon the effectiveness of common control between UP and SPT pursuant to STB approval in Finance Docket No. 32760; and

WHEREAS, PHA and UPRR wish to more specifically define the terms and conditions under which said trackage rights shall be exercised.

NOW, THEREFORE, it is mutually agreed by and between the parties:

1. Rights of PHA and UPRR for Deer Park Lead and Bayport Lead:

(a) Subject to the terms and conditions contained herein, UPRR shall have (1) access to Deer Park Lead and Bayport Lead when they are not needed for the operation of PHA (or, if PHA so designates from time to time, PTRA) and (2) the right to operate trains, locomotives, rail cars (loaded or empty), intermodal units (loaded or empty), cabooses vehicles and machinery which are capable of being operated on railroad tracks or on right-of-way for purposes of the maintenance or repair of such railroad tracks ("Equipment") in UPRR's account over Deer Park Lead and Bayport Lead in common with PHA or, if PHA so designates from time to time, PTRA (but not PTRA's other members), it being understood and agreed that:

(i) PHA shall not switch industries upon the Deer Park Lead or Bayport Lead;

(ii) PHA shall not set out, pick up or store Equipment upon the Deer Park Lead or Bayport Lead, or any part thereof, in such a manner as shall impede the operations and dispatching of UPRR;

(iii) UPRR agrees that it will not hold or store locomotives, cars or trains on the Deer Park Lead or the Bayport Lead in such a manner as will impede the operations of PHA or PTRA.

(iv) PHA shall neither build nor serve any industry, team or house track, intermodal or auto facility now existing or hereafter located along Deer Park Lead or Bayport Lead, except PHA shall have the right to build connections to the expanded intermodal ramp at Barbours Cut Terminal, as such ramp may in the future be expanded or improved (such ramp, as expanded or improved, the "Barbours Cut Rail Ramp"), connections to the Bayport Terminal and such other connections as subsequently agreed to between UPRR and PHA;

(v) Neither UPRR nor PHA shall (a) permit or admit any third party, except PHA may so designate from time to time PTRA (but not other PTRA members), to the use of all or any portion of Deer Park Lead and Bayport Lead under the guise of doing its own business, or (b) contract or make any agreement to handle as its own Equipment over or upon Deer Park Lead and Bayport Lead, or any portion thereof, the Equipment of any such third party which in the normal course of business would not be considered its Equipment; provided, however, that the foregoing shall not prevent UPRR or PHA (or PTRA), pursuant to a run-through agreement with any railroad, from using the locomotives and cabooses of another railroad as its own under this Agreement;

(vi) PHA shall not connect with or interchange with any other railroad upon the Deer Park Lead or Bayport Lead;

(vii) The Deer Park Lead shall be used by PHA (and PTRA) only for the purpose of moving freight to and from Bayport Lead, the Barbours Cut Terminal or its other property (but not between the Barbours Cut Terminal and the Bayport Terminal, except that PHA or PTRA may pick up or set out cars at the Barbours Cut Terminal en route from or to the Bayport Terminal for the sole purpose of consolidating cars with trains having common destinations) which PHA (and PTRA) have the right to serve under prior rights granted by UP;

(viii) Bayport Lead shall be used by PHA (and PTRA) only for the purpose of moving freight to and from the Bayport Terminal. Neither PTRA nor PHA shall have the right to serve any existing or future industry on either UPRR's Bayport Loop or adjacent to other UPRR right-of-way. PHA expressly agrees that the foregoing provision is of paramount importance to this Agreement and that any attempt by PHA to establish rail service to others springing from the Bayport Lead shall

be of no effect and shall void all other rights granted in this Agreement including, without limitation, the right to operate over the right-of-way of UPRR and operating rights which may be granted to PTRA or PHA by subsequent agreements whose purpose is to implement this Agreement.

(b) The rights granted in Section 1 (a) shall be for rail traffic of all kinds and commodities, both carload and intermodal.

(c) PHA shall have no land ownership rights as a result of the rights granted herein.

(d) UPRR shall dispatch Deer Park Lead and Bayport Lead, giving PHA (or, if PHA so designates from time to time, PTRA) trains priority. PHA shall have access to dispatching records for trains operating over the Joint Trackage for the sole purpose of determining whether priority has been given to PHA or PTRA trains; such access may be provided through PHA's status as a member of the PTRA.

(e) UPRR grants (i) to PHA in perpetuity and (ii) to PTRA for the term of the PTRA Agreement of June 30, 1924, as amended or as it may be amended in the future (the "PTRA Agreement"), the right to operate over UPRR's right-of-way underlying the Deer Park Lead and Bayport Lead, subject to the terms and conditions contained herein.

(f) PHA agrees that neither UPRR nor PTRA shall be charged rental or any other fees (except maintenance expenses) for the use of the Deer Park Lead or Bayport Lead.

2. Rights of PHA and UPRR for Barbours Cut Lead:

(a) PHA and UPRR agree to the September 27, 1995 Letter, including without limitation, the numbered paragraphs thereof, as amended and supplemented by this Agreement.

(b) Subject to the terms and conditions contained herein, UPRR shall have (1) access to the Barbours Cut Lead when it is not needed for the operation of PHA (or, if PHA so designates from time to time, PTRA) and (2) the right to operate Equipment in UPRR's account over the Barbours Cut Lead in common with PHA or, if PHA so designates from time to time, PTRA (but not PTRA's other members), it being understood and agreed that:

(i) The Barbours Cut Lead shall be used by PHA (or if PHA so designates from time to time, PTRA) only for the purpose of moving

freight to and from the Barbours Cut Terminal or the Barbours Cut Rail Ramp or other property which PHA or PTRA may have the right to serve under prior rights granted by UPRR; PHA (and PTRA) shall not use the Barbours Cut Lead for the purpose of moving freight between the Barbours Cut Terminal and the Bayport Terminal, except that PHA or PTRA may pick up or set out cars at the Barbours Cut Terminal en route from or to the Bayport Terminal for the sole purpose of consolidating cars with trains having common destinations (example: a PTRA train originates at the Bayport Terminal with outbound traffic generated at the Bayport Terminal and operates over the Joint Trackage to the Barbours Cut Terminal, picks up outbound traffic generated at the Barbours Cut Terminal and continues its outbound movement over the Joint Trackage to the PTRA connection at Deer Park Junction, and vice versa for inbound PTRA trains);

(ii) Only UPRR and PHA (or if PHA so designates from time to time PTRA but not its other members) will have access to the Barbours Cut Lead. No other railroad, switching line or switching agent will be authorized to use the Barbours Cut Lead without UPRR's consent;

(iii) PHA (or PTRA) shall not set out, pick up or store Equipment upon the Barbours Cut Lead, or any part thereof in such a manner as shall impede the operations of UPRR;

(iv) UPRR shall not set out, pick up or store Equipment upon the Barbours Cut Lead, or any part thereof in such a manner as shall impede the operations of PHA (or PTRA);

(v) PHA and PTRA shall not build nor serve any industry, team or house track, intermodal or auto facility now existing or hereafter located along the Barbours Cut Lead, except PHA shall have the right to build connections to the Barbours Cut Rail Ramp, connections to the Bayport Terminal and other connections subsequently agreed to between UPRR and PHA;

(vi) Neither UPRR nor PHA or PTRA shall (a) permit or admit any third party to the use of all or any portion of the Barbours Cut Lead under the guise of doing its own business, or (b) contract or make any agreement to handle as its own Equipment over or upon the Barbours Cut Lead, or any portion thereof, the Equipment of any such third party which in the normal course of business would not be considered

its Equipment; provided, however, that the foregoing shall not prevent UPRR or PHA or PTRA, pursuant to a run-through agreement with any railroad, from using the locomotives and cabooses of another railroad as its own under this Agreement;

(vii) UPRR agrees that the Barbours Cut Lead shall not be used as a tail track for shoving trains or cuts of cars over the hump at Strang Yard or a receiving track for Strang Yard; and (viii) Pursuant to paragraph 3 of the September 27, 1995 Letter, UPRR consents to ITS utilizing a portion of the Barbours Cut Lead as tail room while ITS is switching the Barbours Cut Terminal on behalf of PHA.

(c) The rights granted in Section 2 (b) hereof shall be for rail traffic of all kinds and commodities, both carload and intermodal.

(d) PHA shall have no land ownership rights as a result of the rights granted herein.

(e) UPRR shall dispatch the Barbours Cut Lead.

(f) UPRR grants (i) to PHA in perpetuity and (ii) to PTRA for the term of the PTRA Agreement of June 30, 1924, as amended or as it may be amended in the future (the "PTRA Agreement"), the right to operate over UPRR's right-of-way underlying the Barbours Cut Lead, subject to the terms and conditions contained herein.

(g) PHA agrees that neither UPRR nor PTRA shall be charged rental or any other fees (except maintenance expenses) for the use of the Barbours Cut Lead.

3. Construction of Joint Trackage.

(a) UPRR shall coordinate with PHA to review final engineering for the Barbours Cut Lead and the Deer Park Lead and the final plans and engineering detail shall be subject to approval of UPRR prior to construction, such approval not to be unreasonably withheld.

(b) UPRR will coordinate with PHA and the Texas Department of Transportation ("TxDot") to review the final engineering for the Barbours Cut Lead and the Deer Park Lead. The final plans and engineering details of the Barbours Cut Lead and Deer Park Lead shall be subject to approval by UPRR and by TxDot prior to construction.

(c) PHA will reimburse UPRR up to $941,172 for the costs that UPRR reasonably incurs or has incurred to perform construction work which UPRR agrees to perform related to construction of the Barbours Cut Lead, as detailed in the "Estimate of Material and Force Account Work, for the Port of Houston Authority, Houston Term Sub-MP 22, Project No. 27600" dated November 4, 1997 (the "Estimate"), transmitted by letter of November 6, 1997 from Don Denman of UPRR to Sandra Musgove of PHA, copies of which are attached as Exhibit "B"; provided, however, that should the actual cost reasonably incurred by UPRR exceed this estimated amount, PHA agrees to reimburse UPRR for such additional reasonable cost up to a maximum of $188,234. UPRR agrees to make its records of expenditures in connection with the construction of the Barbours Cut Lead available for audit by PHA, TxDot and Federal Highway Administration ("FHWA"). Should UPRR's actual reasonable cost incurred exceed the estimated cost by more than $188,234, PHA will negotiate in good faith with UPRR for reimbursement of such additional reasonable cost by PHA to UPRR.

(d) PHA will reimburse UPRR up to $4,185,611 for the costs that UPRR reasonably incurs or has incurred to perform construction work which UPRR agrees to perform related to construction of the portion of Deer Park Lead, as detailed in attached Exhibit "C"; provided, however, that should the actual reasonable cost incurred by UPRR exceed this estimated amount, PHA agrees to reimburse UPRR for such additional reasonable cost up to a maximum of $ 837,122; such construction work and estimate include items identified in separate paragraphs of this Section 3 below, specifically scale house relocation in paragraph (l), signals in paragraph (m), grade crossing protection in paragraph (n), and AEI and HBD relocation in paragraph (s). UPRR agrees to make its records of expenditures in connection with the construction of such portion of Deer Park Lead available for audit by PHA, TxDot and FHWA. Should UPRR's actual reasonable cost incurred exceed the estimated cost by more than $837,122, PHA will negotiate in good faith with UPRR for reimbursement of such additional reasonable cost by PHA to UPRR .

(e) PHA shall construct the Joint Trackage and its contractors shall enter into UPRR's standard right of entry agreements and carry UPRR's normal minimum amounts of insurance.

(f) It is understood and agreed the Joint Trackage shall be constructed in such location and manner as shall minimize disruption of UPRR's operations in the area and PHA agrees to construct necessary crossover switches to accomplish this result and to relocate the existing railroad scale, if necessary to construct the Joint Trackage. The actual location of the Joint Trackage including necessary crossover switches and signals and any junction signals or switches shall be determined at the sole discretion of UPRR,

but the Joint Trackage shall be located generally in conformance with the alignment delineated on the plan attached hereto as Exhibit "D".

(g) The Barbours Cut Lead will be constructed substantially in the location delineated on the plan attached hereto as Exhibit "E".

(h) It is understood that PHA will pay all costs and, correspondingly, UPRR will bear no costs, associated with any and all projects provided for in the Settlement Agreement, but UPRR will cooperate with PHA in making available to PHA all pertinent pipeline right-of-way agreements, utility agreements, roadway agreements, etc. in connection with the projects contemplated in this Agreement.

(i) In lieu of PHA constructing a siding to serve as a functional replacement for the siding located between ECS 577+30 and 606+32, UPRR and PHA agree that PHA will place in escrow $687,722 (the "Replacement Siding Escrow Funds"), which is the estimated cost of constructing the replacement siding, as calculated in "HNTB Corporation, Construction Cost Estimate, UPRR Proposed Siding Relocation" dated January 9, 1998, copy of which is attached hereto as Exhibit "F". UPRR may draw down the Replacement Siding Escrow Funds for reimbursement of its cost of constructing a functional equivalent to the eliminated siding in Strang Yard. UPRR shall be reimbursed for any costs incurred for the Replacement Siding up to the amount of the Replacement Siding Escrow Funds whether or not PHA receives Federal and/or State funding. UPRR shall provide sufficient documentation of costs incurred to satisfy the legal requirements of TxDot and FHWA for projects receiving federal funding. UPRR agrees to make its records of expenditures on the functional replacement construction available for audit by PHA, TxDot and FHWA.

(j) PHA will revise the design of the Deer Park Lead to incorporate the replacement of the switch to the Shell Oil Company; due to construction scheduling, installation of the switch may be performed in a late stage of Deer Park Lead construction (but in any event, installation of the switch will be completed no later than the date when such construction is 90% complete), with straight rail installed on the new track until such time as the siding and switch for Shell Oil is ready to be cut into the Deer Park Lead.

(k) PHA will reimburse UPRR for any cost UPRR incurs to perform certain construction work which UPRR agrees to perform related to construction of the Bayport Lead, as will be detailed in an Estimate that will be prepared by UPRR and shall be subject to PHA's written approval when the Bayport Lead track design engineering is prepared by PHA's engineering contractor; provided, however, that should the actual cost incurred by UPRR exceed this estimated amount, PHA agrees to reimburse UPRR for such additional reasonable cost up to a maximum of 20% of the estimated cost of UPRR work. UPRR agrees to make its records of expenditures in connection with the construction of the

Bayport Lead available for audit by PHA, TxDot and Federal Highway Administration ("FHWA"). Should UPRR's actual reasonable cost incurred exceed the estimated cost by more than 20% of the estimated cost of UPRR work, PHA will negotiate in good faith with UPRR for reimbursement of such additional reasonable cost by PHA to UPRR

(l) UPRR shall relocate the scale house associated with the weigh-in-motion scale located at Milepost 20.43. The location of the replacement scale house will be determined by UPRR, and the cost of such relocation is included in the estimate provided under paragraph (d) of this Section 3.

(m) Subject to and to the extent provided in paragraph (d) of this section 3, PHA shall pay the cost of signals required to protect the power-operated switches included in the Joint Trackage and on UPRR end of crossovers between the Joint Trackage and the UPRR track, which costs are included in the estimate provided under paragraph (d) above. UPRR shall present plans for any such additional signal installation on the Joint Trackage to PHA's Chief Engineer for approval prior to construction, with such approval not to be unreasonably withheld.

(n) Subject to and to the extent provided in paragraph (d) of this section 3, PHA shall reimburse UPRR for any and all costs associated with constructing, adjusting, relocation, etc. of grade crossings including automatic grade crossing protections systems, warning protection and approaches located on or along the Joint Trackage which costs are included in the estimate provided under paragraph (d) above.

(o) Existing billboards at the following locations shall be removed to allow construction of the Deer Park Lead: (1) ECS 715+80, approximately Milepost 18.1, (2) ECS 749+00, approximately Milepost 18.75, (3) ECS 763+40, approximately Milepost 19.0, (4) ECS 786+50, approximately Milepost 19.4, (5) ECS 874+60, approximately Milepost 21.1, (6) ECS 884+20, approximately Milepost 21.25, (7) ECS 905+00, approximately Milepost 21.7, and (8) ECS 921+28.53, approximately Milepost 22.0. Upon cancellation of the contract(s) covering such billboards by UPRR, PHA shall pay to UPRR and UPRR shall accept $59,212.11 as full compensation for (i) all foregone revenues on the above referenced billboards, and (ii) any and all cost incurred as a result of such cancellation(s), including, without limitation, any penalty payments, attorneys' or other legal fees and expenses, damages, etc. It is understood and agreed that UPRR has completely fulfilled its obligations associated with the removal of the existing billboards referenced herein. UPRR acknowledges receipt of the payment of $59,212.11 by PHA.

(p) At the following locations PHA will construct, at its sole cost and expense, the following portions of the Deer Park Lead south of the existing UPRR track: (1) ECS 549+00 (property line between PHA and UPRR) to ECS 570+23.05, approximately Milepost 14,86

and 15.25, respectively; and (2) ECS 647+20.87 to ECS 684+97.81, approximately Milepost 16.8 and 17.5. At each of these locations, when construction of the above referenced trackage is completed, PHA shall convey to UPRR by Bill of Sale or other appropriate document, at no cost or expense to UPRR, ownership of the portions of the Deer Park Lead constructed south of the existing UPRR track and UPRR shall convey to PHA by Bill of Sale or other appropriate document, at no cost to PHA, ownership of the existing UPRR track located adjacent to such portions of the Deer Park Lead.

(q) PHA will, for and on UPRR's behalf, take all action and pay all cost (including loss of revenue, administrative fees, attorneys' or other legal fees, etc.) required to be taken or paid by UPRR in connection with any relocation, encasement, adjustment, etc. of pipelines or utilities within UPRR right-of-way on account of this Agreement if and to the extent such actions or costs are required in accordance with the terms of applicable agreements or otherwise up to a maximum of $418,561; should UPRR's actual reasonable cost incurred exceed this amount, PHA will negotiate in good faith with UPRR for reimbursement of such additional reasonable costs by PHA to UPRR.

(r) PHA will relocate the existing Automatic Equipment Identification reader (AEI) located at ECS 668+50 and the existing Hot Box Detector (HBD) located at ECS 676+80, both of which are between Milepost 17 and Milepost 17.5, to the new track, which is to be constructed to the south of the existing track at the location of these devices; however, if UPRR desires to install new AEI and HBD devices in lieu of or in addition to relocating the existing devices, PHA's financial responsibility will not exceed the cost of relocating the existing devices.

4. Allocation of Maintenance Expense:

(a) PHA shall be responsible for maintaining the Joint Trackage and shall arrange to have PTRA maintain the Joint Trackage to the standard provided for in the PTRA Agreement. The expense incurred by PTRA to perform maintenance services on the Joint Trackage shall be allocated as outlined below.

(b) Separate records and accounts will be kept by the parties so as to show total maintenance expenses incurred and such records and accounts shall be open and available to all parties at all reasonable times by prior appointment.

(c) Maintenance and operating expenses incurred by any party under the provisions of subsection (a) of this Section 4 will be borne by and prorated between UPRR (acting on its own behalf rather than as a member of the PTRA) and PHA (or PTRA) on the basis of the proportions that the number of cars handled by UPRR (acting on its own behalf

rather than as a member of the PTRA), and the number of cars handled by PHA (or PTRA) bear to the total number of cars handled over the Joint Trackage.

(d) The phrase "number of cars" as used in subsection (c) of this Section 4 shall be interpreted to include both loaded and empty cars handled by any of the parties hereto, except that only fifty percent (50%) of loaded and empty cars handled in intracity switching service shall be included in the number of cars handled.

(e) The count of cars will be on the basis that each loaded and empty car will be counted once when entering upon any of the Joint Trackage over which rights and privileges of joint operations have been granted by PHA and counted once when leaving the Joint Trackage; provided, however, that intermediate moves shall not be counted and cars in work service shall not be counted.

(f) Expenses of maintenance and operations to be borne by the parties in accordance with subsection (c), (d) and (e) of this Section 4 shall be apportioned among railroad member lines of PTRA in accordance with provisions of Article X of the PTRA Agreement, except that it is understood and agreed that cars handled by UPRR, while acting as an individual railroad, over trackage used jointly with PHA or PTRA shall not be counted in apportioning maintenance and operating expenses among railroad member lines of PTRA.

5. Liability:

(a) The term "party" as used hereinafter in this Section shall mean UPRR (acting on its own behalf rather than as a member of the PTRA), PHA or PTRA as the case may be, and the term "parties" shall mean UPRR (acting on its own behalf rather than as a member of the PTRA), PHA and PTRA, collectively.

(b) The term "Damages" shall mean all loss of or damage to any and all property and all injuries to or death of any and all persons, and all liability therefor, and embraces all payments made on account thereof, including amounts paid or payable under all applicable laws, and also embraces all cost and expense incident to any such injuries, death, loss or damages, suffered or occasioned in or in connection with the construction, operation, maintenance, repair or renewal of the Joint Trackage covered by this Agreement, or the making of additions and betterments thereto, changes therein, or retirements therefrom or in connection with the performance of work or operations by UPRR, as an individual railroad in or incident to the movement of its engines, cars or trains from or to its sole property or sole industries.

(c) The term "Joint Property" shall mean:

(i) the Joint Trackage;

(ii) any engine, machinery, equipment and tools, as well as any other property of UPRR, PHA or PTRA while on or about said the Joint Trackage (except any turnouts or trackage used solely by UPRR) in or incident to the construction, operation, maintenance, repair or renewal of, said Joint Trackage, the making of additions and betterments thereto, changes therein, or retirements therefrom;

(iii) any engine and equipment comprising any wrecking outfit while on said Joint Trackage or on tracks of any industry reached thereby in or incident to the performance of any wrecker service the cost of which is to be assumed and borne jointly by the parties pursuant to the provisions of this Section.

(d) The term "Sole Property" shall mean each party's property and property whosoever while in the possession or control of such party, except while Joint Property as defined in (c) of this Section; provided, however, there shall also be considered as Sole Property any engine, machinery, equipment and tools described in (c) hereof, or any engine and equipment comprising any wrecking outfit while on said Joint Trackage, or on track of any industry reached thereby in or incident to the performance of wrecker or other service the cost of which is to be assumed and borne by solely one of the parties pursuant to the provisions of this Agreement.

(e) The term "Joint Employees" shall mean:

(i) persons while on or about said Joint Trackage (except any turnouts or trackage used solely by UPRR) in or incident to the construction, maintenance, operation, repair or renewal of, the making of additions and betterments to, changes in, or retirements from, any of said trackage;

(ii) all persons assigned to any engine or equipment while such engine or equipment has the status of occupying the Joint Property.

(f) The term "Sole Employee" shall mean the officers, employees, agents and contractors of each party, except while Joint Employees as defined in (e) of this Section.

(g) The term "Cars Handled Basis" shall mean the basis upon which the cost of maintenance is allocated under Section 4 of this Agreement.

(h) Each of UPRR, PHA and PTRA, as the case may be, shall be bound to use only reasonable care, skill and diligence in the maintenance, repair or renewal of trackage maintained by it under this Agreement, and none of UPRR, PHA nor PTRA shall have or make against the other any claim or demand for any Damages whatsoever by reason of any defect in said trackage, or by reason of failure or neglect of any of UPRR, PHA or PTRA to repair any such defect.

(i) Except as may be elsewhere in this Agreement otherwise provided, Damages shall be allocated to, and liability therefor shall be assumed by, the parties as and in the manner hereinafter provided:

(i) Damages when due to (1) the acts or omissions, negligent or otherwise, of a Sole employee or Sole Employees of one of the parties, or (2) the concurring acts or omissions, negligent or otherwise, of a Joint Employee or Joint Employees and of a Sole Employee or Sole Employees of one of the parties, or (3) any defect in or failure of any kind in the Sole Property of one of the parties, shall be borne by the party whose Sole Employee or Sole Employees was or were solely or concurrently involved, or by the party whose Sole Property was defective or failed.

(ii) Damages when due to (1) the concurring acts or omissions, negligent or otherwise, of a Sole Employee or Sole Employees of one of the parties and a Sole Employee or Sole Employees of another party or parties, or (2) the concurring acts or omissions, negligent or otherwise, of a Joint Employee or Joint Employees and of a Sole Employee or Sole Employees of two or more parties, or (3) defects of any kind in the Sole Property of two or more parties, shall be borne equally by the parties whose Sole Employee or Sole Property is involved, except that a party shall bear all Damages as to its Sole Property and as to its Sole Employees, passengers and patrons, and all others on its engines, cars or trains (other than engines, cars or trains while occupying the status of Joint Property as provided in paragraph (c) of this Section) or on or about the Joint Property in the transaction of such party's business or of business with such party.

(iii) Damages when due to (1) the acts or omissions, negligent or otherwise, of a Joint Employee or Joint Employees, or (2) the failure

of or defect in any of the Joint Property, or (3) any other cause whatsoever not hereinabove provided for, shall be borne by each of the parties as to such party's Sole Property and as to such party's Sole Employees, passengers and patrons, and all others on such party's engines, cars or trains or on or about Joint Property in the transaction of such party's business or of business with such party, and shall be prorated among PTRA, PHA and UPRR on a cars-handled basis as to third persons and their property, Joint Employees and their property, and Joint Property, except that, in the case of an incident in which the engines, cars, trains (other than engines, cars or trains while occupying the status of Joint Property as provided in paragraph (c) of this Section) or Sole Employees of only one of the parties are concerned, then the liability for the resulting Damages shall be borne solely by such party whose engines, cars, trains or Sole Employees were solely concerned.

(j) Each party shall indemnify and save harmless each of the other parties, its successors and assigns, from and against any and all liability or claim for damages, cost and expense herein assumed by it; provided, however, that the party liable, in whole or in part, as to any claim or suit filed against another party shall be given prompt notice thereof by such other party and an opportunity to join in or take over, as may be appropriate, the defense and settlement of such claim or suit.

(k) Any party may make settlement of all claims for Damages for which it shall be jointly liable hereunder but no payment in excess of One Hundred Thousand Dollars ($100,000.00) shall be voluntarily made by any party in settlement of any claim without first having obtained in writing the consent of the other parties; and in making voluntary settlements as aforesaid, the party making the same shall in all cases procure from each claimant and deliver to the other parties a written release from liability in the premises, said releases to PHA to include and extend to each railroad member signatory hereto.

(l) Any party may make settlement of all claims against third parties in which the other parties may have an interest, but no settlement of any claim whose value exceeds One Hundred Thousand Dollars ($100,000.00) shall be voluntarily made by any party without first having obtained, in writing, the consent of the other parties.

(m) All claims and demands for Damages arising under the provisions of this Section shall be investigated by or for the account of the party whose employee is injured or whose property is damaged, but in the event employees of two or more parties are injured, or the properties of two or more parties are damaged, the representatives of such

parties who handle such claims shall agree among themselves as to which of said parties shall make the investigation as it deems necessary or desirable.

(n) Any liability for Damages assumed by PTRA pursuant to the provisions of this Section shall be by PTRA prorated among the member lines, including UPRR, on the basis of the number of loaded and empty cars handled for the account of each member line.

(o) **IT IS THE EXPRESSED INTENTION OF UPRR AND PHA THAT THE LIABILITY AND ALLOCATION PROVISIONS DETAILED THIS PARAGRAPH (5) SHALL APPLY TO DETERMINE LIABILITY BETWEEN PHA OR UPRR EVEN IF PHA OR UPRR IS ACCUSED OF CAUSING DAMAGES THROUGH ITS NEGLIGENCE, NEGLIGENCE PER SE OR STRICT LIABLITY RESULTING FROM A VIOLATION OR ALLEGED VIOLATION OF ANY FEDERAL, STATE OR LOCAL LAW OR REGULATION, INCLUDING BUT NOT LIMITED TO THE FEDERAL EMPLOYERS LIABILITY ACT ("FELA"), THE SAFETY APPLIANCE ACT, THE LOCOMOTIVE INSPECTION ACT, THE BOILER INSPECTION ACT, THE OCCUPATIONAL SAFETY AND HEALTH ACT ("OSHA"), THE RESOURCE CONSERVATION AND RECOVERY ACT ("RCRA"), THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT ("CERCLA"), THE CLEAN WATER ACT ("CWA"), THE OIL POLLUTION ACT ("OPA"), AND ANY SIMILAR STATE STATUTE IMPOSING OR IMPLEMENTING SIMILAR STANDARDS WHERE THAT NEGLIGENCE IS A CONCURRING CAUSE OF INJURY, DEATH, OR DAMAGE.**

6. Governing Laws:

This Agreement shall be construed and interpreted in accordance with the laws of the State of Texas without reference to its conflicts of law rules.

7. Assignability:

Subject to the provisions of this Section 7, this Agreement and any rights granted hereunder may not be assigned in whole or in part by PHA or UPRR without the prior written consent of the other; provided, however, that this Agreement may be assigned: (i) by UPRR without the prior written consent of PHA (a) as a result of a merger, corporate reorganization, consolidation, change of control of UPRR or the sale by it of substantially all of its assets, or (b) to a railroad operating affiliate of UPRR, where the term "affiliate" means a corporation, partnership or other entity controlled, controlling or under common control with UPRR; and (ii) by PHA without the prior written consent of UPRR only to a successor port authority or governmental agency (x) as a result of a consolidation or other

combination of PHA with one or more other port authorities, or (y) as a result of the assignment of PHA's duties and responsibilities to another governmental entity in the State of Texas. In the event of an authorized assignment, this Agreement and the operating rights hereunder shall be binding upon the successors and assigns of the parties.

In the event the PTRA Agreement is terminated and PHA elects to have all of the duties then provided by PTRA for PHA performed by any entity other than UPRR ("New Entity"), all references herein to PTRA shall thereafter mean the New Entity provided that prior to the commencement of operations by the New Entity over the Joint Trackage PHA shall: (i) notify UPRR in writing of the identity of the New Entity, the duties the New Entity shall generally perform and the date upon which such performance shall commence; (ii) demonstrate that the New Entity has ten (10) years of satisfactory operating experience, including, but not limited to, satisfactory levels of railroad signal systems expertise, operating safety and efficiency; and (iii) secure execution by the New Entity of a joint track operating agreement with UPRR similar in form to the agreement executed between PHA, PTRA and UPRR. It is further understood and agreed between PHA and UPRR that: (a) Sections 4 and 5 of this Agreement will require modification to reflect the commencement by the New Entity of performance as provided above; (b) there will be no change in the methodology for the allocation of costs hereunder nor any additional costs or charges assessed to Users; and (c) the New Entity shall provide evidence of (x) self-insurance capability adequate to satisfy any and all of its liabilities under this Agreement or (y) insurance coverage that satisfies the insurance requirements described in attached Exhibit "G" or, if any such insurance coverages are not generally available at the time the New Entity begins performance of duties hereunder, insurance coverage otherwise reasonably satisfactory to UPRR.

8. Notices:

All notices, demands, requests, submissions and other communications which are required or permitted to be given pursuant to this Agreement shall be given by a party to any other in writing and shall be deemed properly served if delivered by hand, or mailed by overnight courier or by registered or certified mail, return receipt requested, with postage prepaid, to such other party at the address listed below:

If intended for UPRR:

Executive Vice President-Operation
Room 1206
1416 Dodge Street
Omaha, Nebraska 68179

With a copy to:

Director Joint Facilities
Room 1200
1416 Dodge Street
Omaha, Nebraska 68179

If intended for PHA:

Executive Director
Port of Houston Authority
P.O. Box 2562
Houston, TX 77252-2562

With a copy to:

General Counsel
Port of Houston Authority
P.O. Box 2562
Houston, TX 77252-2562

Notice of address change may be given any time pursuant to the provisions of this Section 8.

9. Settlement Agreement.

This Agreement is entered into to implement certain provisions of the September 27, 1995 Letter. The provisions, rights and obligations set forth in the September 27, 1995 Letter, as amended and supplemented from time to time, shall survive, and nothing herein shall be deemed to repeal or supersede the September 27, 1995 Letter, as amended and supplemented. If any conflict between the September 27, 1995 Letter and this Agreement shall arise, the provisions of the September 27, 1995 Letter, as amended and supplemented, shall govern.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

PORT OF HOUSTON AUTHORITY OF HARRIS COUNTY, TEXAS

By: _____
Its: EXECUTIVE DIRECTOR

UNION PACIFIC RAILROAD COMPANY

By: _____
Its: Gen Mgr

Letter from UP to SEA regarding rail operations in the Bayport Loop and Houston area, dated November 7, 2002

UNION PACIFIC RAILROAD COMPANY

Joseph J. Adams
Chairman's Special Representative

808 Travis Suite 820
Houston, TX 77002
713-220-3239

24125 Aldine Westfield
Spring, TX 77373
281-350-7501

November 7, 2002

Ms. Victoria Rutson
Chief
Section of Environmental Analysis
Office of Economics, Environmental Analysis,
And Administration
Surface Transportation Board
Washington, D.C. 20423

Re: Finance Docket No. 34079 - San Jacinto Rail Limited
Construction Exemption - And The Burlington Northern and Santa
Fe Railway Company - Operation Exemption - Build-Out to the
Bayport Loop Near Houston, Harris County, Texas

Dear Ms. Rutson:

This letter contains information about rail traffic movements in the Houston area which was requested of me by your letter dated September 6, 2002, but not received at my address. As I have indicated in conversations with Ms. White of your staff and Mr. Summerville of ICF Consulting, it has been challenging and time consuming to assemble the data. Having said that, the information provided has been carefully reviewed so it is as accurate as reasonably possible.

I have informally been providing preliminary information about various line segments to Ms. White and Mr. Summerville to expedite review by the Section of Environmental Analysis as you prepare the Draft Environmental Impact Statement in the San Jacinto proceeding. I am now able to provide a formal response to you.

Response to Question I

The following table indicates the number of cars handled by Union Pacific on the Bayport Loop between 1999 and mid-2002. The numbers were calculated using internal Union Pacific transportation data enhanced with waybill information. The data were partially validated by running car counts from an AEI reader which registers Bayport Loop traffic. The AEI reader registered 320 daily car movements during the month of May 2002. It should be noted that the average daily count includes data for Saturdays, Sundays and holidays when little traffic moves. Accordingly, particularly on days with heavy industry releases, the car counts rise substantially, sometimes exceeding 600 cars per day. The peak movement for a single day has been 749 cars. Volume exceeds 400 cars per day 25 percent of the time and 480 cars per day 10 percent of the time.

Union Pacific Loaded and Empty Originations and Terminations on Bayport Loop

Year	Total Loads and Empties	Average Daily Loads and Empties
1999	108,586	297
2000	110,275	301
2001	104,575	287
First Half 2002	56,146	310

Response to Question 2

UP moves traffic into and out of the Bayport Loop via Strang Yard. . Cars moving to and from customers on the Bayport Loop will be switched at Strang Yard. Inbound cars can be switched into blocks for delivery prior to arrival at Strang at other UP yards, e.g., Settegast, Englewood, Spring or Dayton, depending upon the car's origin. All outbound cars moving from the Bayport area are classified for further outbound movement at Strang. Bayport Loop traffic is combined with traffic moving from plants along the Ship Channel and made into outbound trains at Strang.

All plastic pellet cars billed to storage from the Bayport Loop are moved to various other intermediate locations. UP is not initially given final destination information by its shipper for storage cars. A car which later will be destined to Chicago or to New Orleans will first go to one of several different storage locations. Generally, plastics cars from the Bayport Loop are stored at Galveston or Spring, depending upon capacity constraints at those locations.

Outbound Bayport Loop shipments (other than those going to storage) destined to the north move on a through train (QSRNL) from Strang to North Little Rock, bypassing Houston processing yards. Traffic destined to New Orleans moves on a through train (QSRLI) from Strang to Livonia, also bypassing Houston processing yards. The balance of traffic is moved to Settegast or Englewood by (QSRHO and QSREW respectively) for further processing to outbound trains. Traffic moves from Strang over the Strang Subdivision and, depending upon destination and dispatching protocol, uses various routes to depart the Houston complex.

To handle the movements noted above, on weekdays Union Pacific normally operates four designated outbound chemical trains westward from Strang Yard over the Strang subdivision to Manchester Junction. These four trains then are normally routed as follows, but can be dispatched over other routes if its normal route is blocked or congested:

Northbound

QSRNL - Strang Sub to Tower 30, GH&H to Tower 85, East Belt to Interstate Jct., HB&T to Belt Jct., UP Toll Road line out of Houston. (5 days per week)

QSRLI - Strang Sub to Tower 30, GH&H to Congress Yard, West Belt to Belt Jct., HB&T to Gulf Coast Jct., UP Beaumont Sub out of Houston. (5 days per week)

QSRHO - Strang Sub to Tower 30, East Belt to Tower 87 into Settegest Yard. (7 days per week)

QSREW - Strang Sub to Tower 30, SP Galveston Outbound (Bridge 5A route) to Tower 68 into Englewood Yard. (5 days per week)

USRGV - Strang Sub to Tower 30, GH&H to Galveston. (Hauls loaded plastic cars to Galveston for storage in transit, 1 day per week)

USRSP - Same as QSRNL. (Hauls loaded plastic cars to Spring for storage in transit, 2 days per week)

Southbound

Except for a through train from Pine Bluff to Strang (MPBSR), southbound empties and loads going to the Bayport Loop are routed through Englewood Yard where they are classified and then move on trains which are routed over the SP Galveston Outbound (Bridge 5A route to Strang Yard).

MPBSR (with PTRA cars to set out) - Lufkin Sub to Tower 26, SP main to Tower 68, Galveston Outbound (Bridge 5A route) to Tower 86, Strang Sub to Strang Yard (7 days per week).

MEWSR - (7 days per week)
MEWSRB - (7 days per week)
MEWSRC - (5 days per week)
All operate Englewood Tower 68, SP Galveston Outbound (Bridge 5A route), Tower 30, Strang Sub to Strang Yard.

Maps are attached hereto indicating the train routings described above.

Response to Question 3

We have reworked the tables submitted in your letter to provide all data that were reasonably available from automatic equipment identification (AEI) readers and computer aided dispatching (CAD) sources or that could be satisfactorily estimated by railroad transportation managers because train movements are regularly scheduled over the segments in question. Where information could not be ascertained with reasonable accuracy "unavailable" is indicated.

	No-Action Alternative - Rail Line Segments (Current Traffic Movements)	Average Number of Trains per Day (All Carriers)	Average Number of Rail Cars (Loaded and Empty) per Train	Average Number of Hazardous Materials Cars per Train
A	Bayport Industrial Lead	7.4 (X) +3.1 (Z) 10.5	43.4 Unavailable	10 Unavailable
B	Strang Subdivision (from Strang Yard to Tower 30)	7.8 UP 5.3 BNSF	42.3 30.5	15 Unavailable
C	GH&H Line (from Tower 30 to Tower 85)	4.1 UP 0.9 BNSF	Unavailable Unavailable	Unavailable Unavailable
D	East Belt (from Tower 85 to Tower 87)	14.8 UP 10.3 BNSF	Unavailable Unavailable	Unavailable Unavailable

	Proposed Action and Alternatives - Rail Line Segments (Current Traffic Movements)	Average Number of Trains per Day (All Carriers)	Average Number of Rail Cars (Loaded and Empty) per Train	Average Number of Hazardous Materials Cars per Train
E	GH&H Line (from Graham Siding to Tower 30)	3.4 UP	53.5	9.5
C	GH&H Line (from Tower 30 to Tower 85)	4.1 UP 0.9 BNSF	Unavailable Unavailable	Unavailable Unavailable
D	East Belt (from Tower 85 to Tower 87)	14.8 UP 10.3 BNSF	Unavailable Unavailable	Unavailable Unavailable
F	Terminal Subdivision (from Tower 87 to Dawes)	14.9 UP (Includes 0.9 AMTRAK) 5.8 Foreign Freight (all BNSF except for Tex Mex Beaumont Laredo train)	66.3 53.1	Unavailable Unavailable
G	Lafayette Subdivision (from Dawes to Dayton Junction)	Same as above	Same as above	Same as above
H	Baytown Subdivision (from Dayton Junction to CMC Plastic Storage Yard)	7.7 UP 7.2 BNSF	Unavailable Unavailable	Unavailable Unavailable

Sources by segment:

A - (X) - Data from AEI reader 639 on main line approach to North end of Bayport Loop.
(Z) - Information provided by UP Director Industrial Management as to trains which operate exclusively on the Loop and do not pass AEI reader 639. Note: Car counts only available for trains passing AEI reader.

B - UP data from AEI reader 596 at Deer Park. AEI reader 164 at Manchester used to capture UP LHU09. BNSF Barbour's Cut trains from AEI reader 596. Inforamtion on three BNSF local jobs from UP/BNSF Joint Director Spring Dispatching Center (BNSF locals not recorded by AEI reader 164).

C - Information provided by UP/BNSF Joint Director Spring Dispatching Center.

D - Computer Aided Dispatching (CAD) data.

E - From AEI reader 889 at GH&H MP 6 south of Tower 30.

F&G - From AEI reader 598 at Dawes.

H - Information on train movements provided by UP service unit Director Transportation Services and by UP/BNSF Joint Director Spring Dispatching Center.

AEI readers were utilized wherever possible. All movements during the month of May 2002 were analyzed. Light engine movements were identified and are included as a train when calculating average car count. We are comfortable in taking a one month sample since there is not a wide variation in traffic over the line segments in question on a monthly basis. AEI readers provide data which identify cars used to transport hazardous material either loaded or "last contained hazardous materials" because residue may be dangerous. For segments on which AEI readers are not located, train movements were calculated using data derived from the CAD system or through information provided by railroad transportation managers as to train operations over the line in question.

You have asked about the accuracy of the data supplied as a result of this analysis as compared to FRA/TexDot data. The current data are more accurate in that the information supplied to the FRA for Texas on an annual basis is made less specific by assigning maximum movements over segments of track to all crossings unless a crossing is specifically analyzed. Where a crossing is analyzed, local switching movements back and forth over the crossing are included as separate train movements. In making estimates for particular crossings, only nearby AEI data for maximum of a week is calculated. Finally, the data TexDot typically utilizes is obtained through the FRA database and, we are advised, can consist of the average of several years worth of railroad supplied information. On occasion, TexDot will contact the railroad directly for train movements over a specific crossing and the railroad will furnish such estimates. Train movement data generated as a result of your inquiry will be furnished to the FRA as part of our annual update.

I trust that you will find the above information helpful in meeting your responsibilities in preparing the environmental impact statement for the San Jacinto proceeding. Please feel free to contact me should you require further clarification of the information contained in this letter or you have additional questions about Union Pacific's operations in Houston.

Very truly yours,

Joseph J. Adams

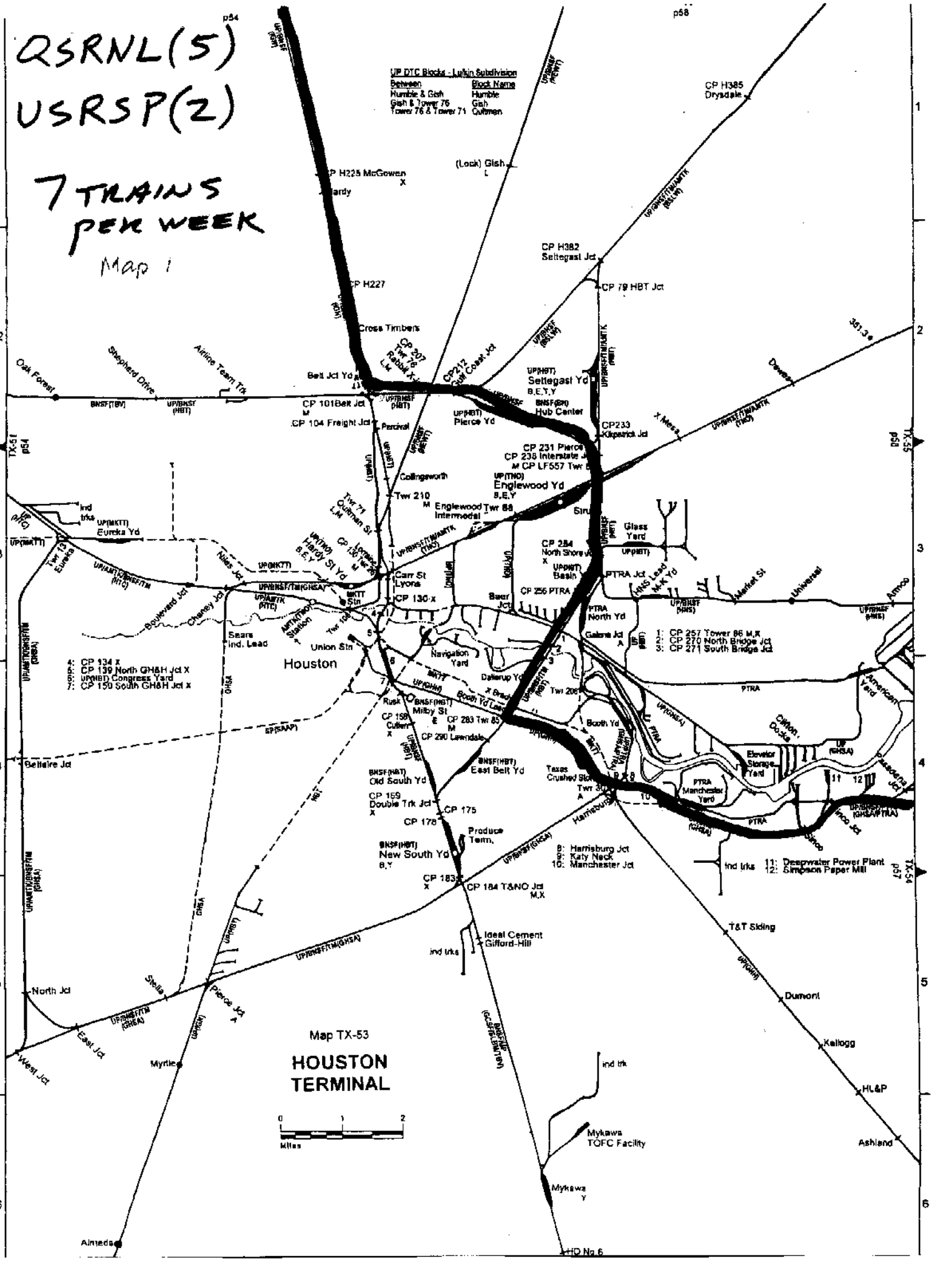
Joseph J. Adams

Cc: Parties of Record in Finance Docket No. 34079
Dr. Steve Roop, Texas Transportation Institute
Mr. Steve Barkley, Union Pacific Railroad
Mr. Rollin Bredenberg, Burlington Northern/Santa Fe Railway

QSRNL(5)
USRSP(2)

7 TRAINS PER WEEK

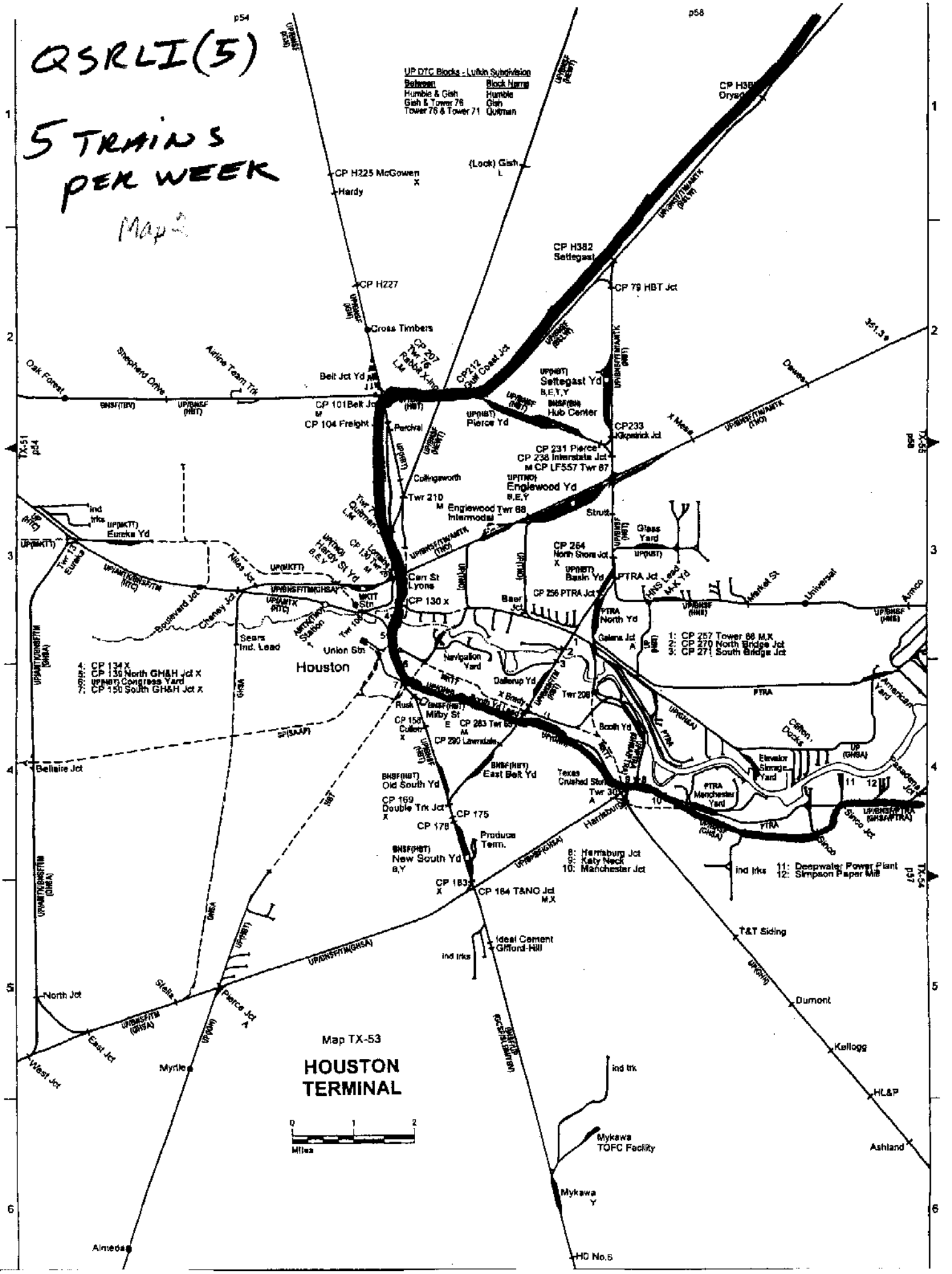
Map 1



QSRLI(5)

5 TRAINS PER WEEK

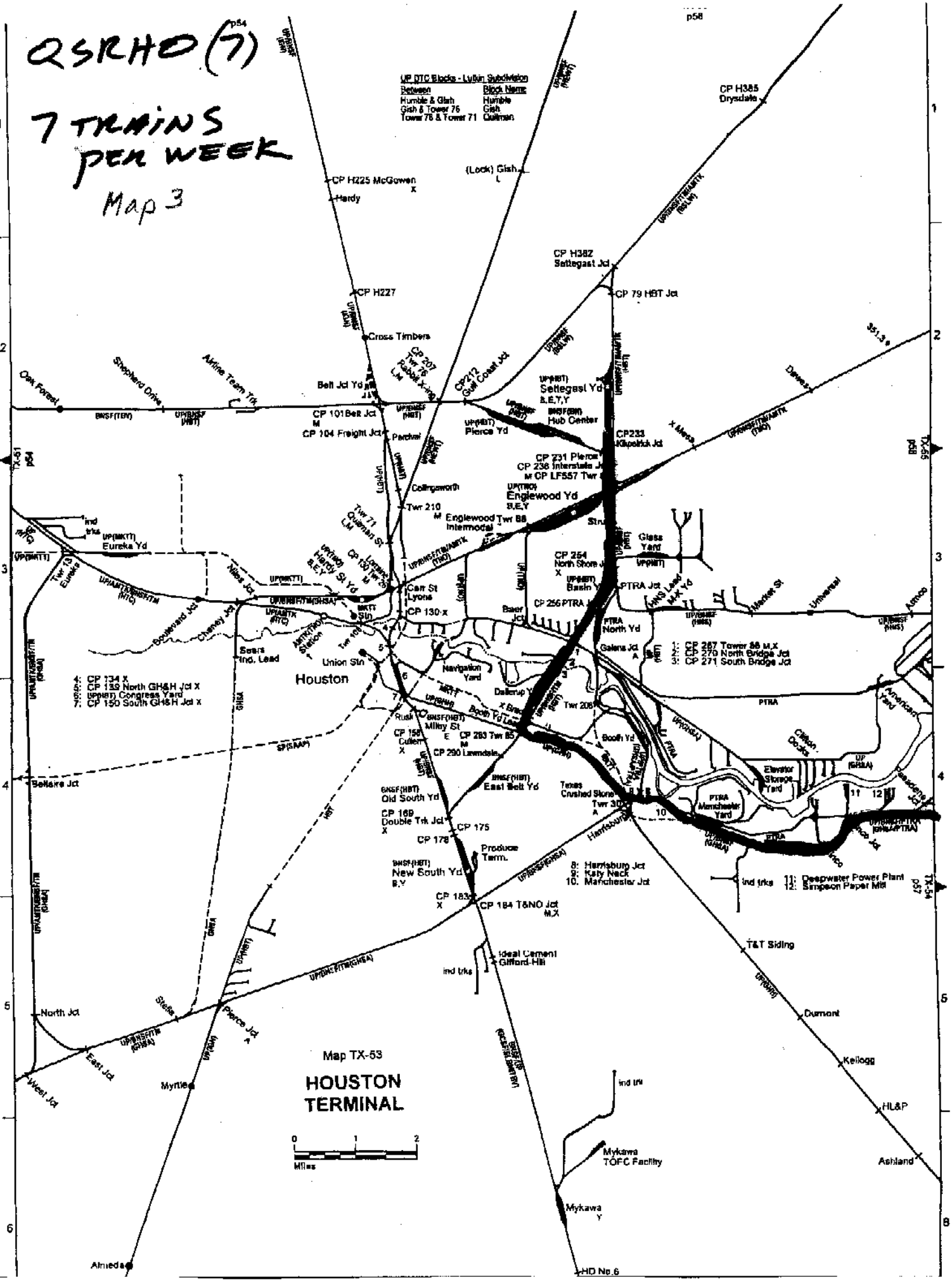
Map 2



QSRHO (7)

7 TRAINS PER WEEK

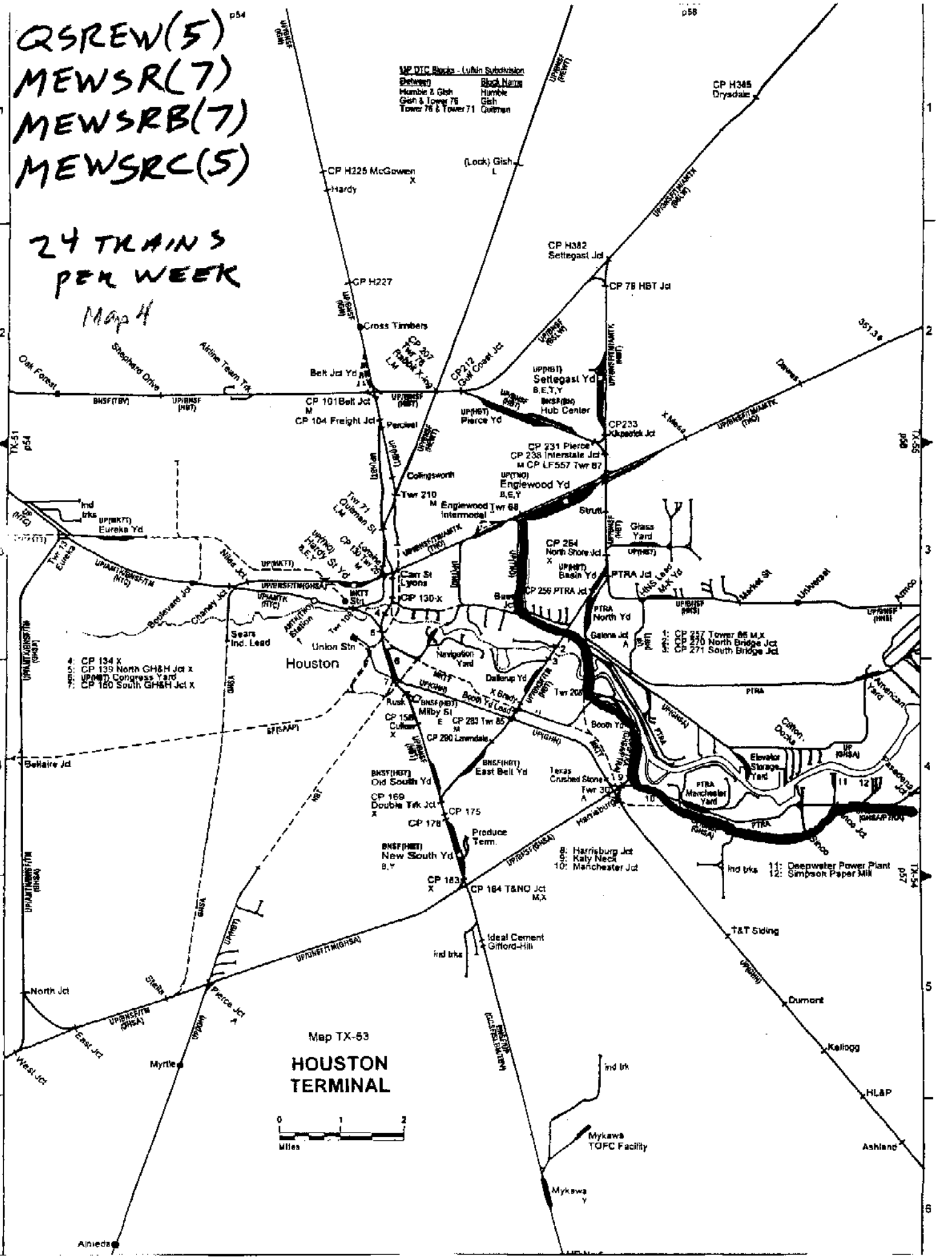
Map 3

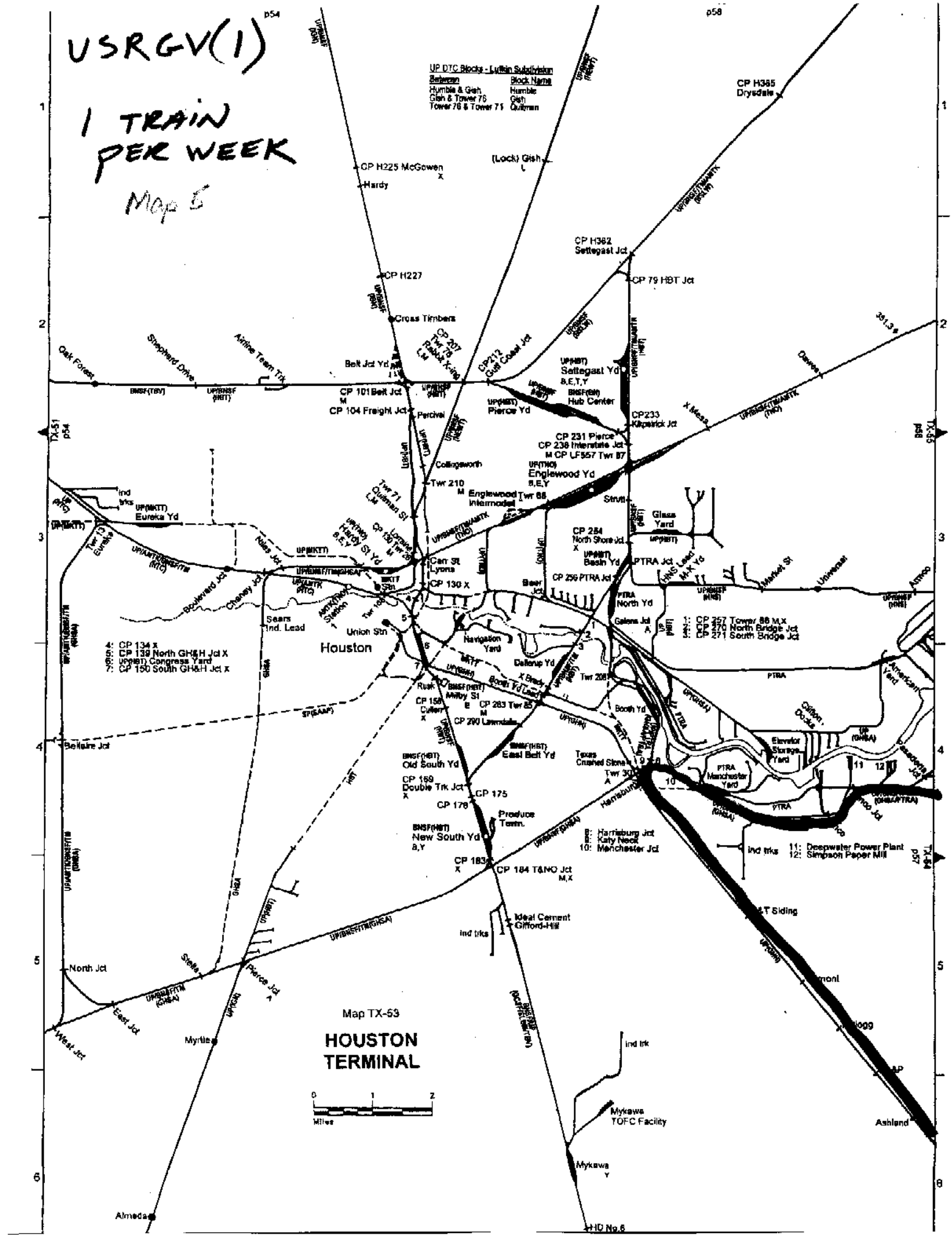


QSREW(5)
MEWSR(7)
MEWSRB(7)
MEWSRC(5)

24 TRAINS PER WEEK

Map H




USRGV(1)
1 TRAIN PER WEEK
Map 6
UP DTC Blocks - Lufkin Subdivision
Between
Block Name
Humble & Gish
Humble
Gish & Tower 76
Gish
Tower 76 & Tower 71
Quitman
CP H225 McGowen
Hardy
(Lock) Gish
CP H385 Drysdale
CP H382 Settegast Jct
CP H227
CP 79 HBT Jct
Cross Timbers
Oak Forest
Shepherd Drive
Airline Team Trk
Belt Jct Yd
CP 101 Belt Jct
CP 104 Freight Jct
Percival
CP212 Gulf Coast Jct
UP(HBT) Settegast Yd
Hub Center
Pierce Yd
CP233 Kilpatrick Jct
CP 231 Pierce
CP 238 Interstate Jct
Englewood Yd
Englewood Intermodal
Twr 210
Twr 88
Eureka Yd
Ind trks
Twr 71 Quitman St
Quitman St Yd
Lorraine Yard
Carr St Lyons
CP 130 X
Struts
Glass Yard
CP 284 North Shore Jct
Basin Yd
PTRA Jct
CP 256 PTRA Jct
PTRA North Yd
HNC Lead
M-K Yd
Market St
Uniwest
Atmos
Rules Jct
Boulevard Jct
Cheney Jct
Sears Ind. Lead
Union Stn
Houston
Navigation Yard
Dallerup Yd
Twr 208
Rusk
Belt Jct
Belt Yd
Melby St
CP 283 Twr 85
CP 150 Cullen
CP 290 Lawndale
Booth Yd
Galena Jct
1: CP 257 Tower 86 M,X
2: CP 270 North Bridge Jct
3: CP 271 South Bridge Jct
4: CP 134 X
5: CP 139 North GH&H Jct X
6: UP(HBT) Congress Yard
7: CP 150 South GH&H Jct X
Bellaire Jct
Old South Yd
East Belt Yd
Texas Crushed Stone
Twr 30
CP 169 Double Trk Jct
CP 175
CP 178
Produce Term.
New South Yd
CP 183
CP 184 T&NO Jct
8: Harrisburg Jct
9: Katy Neck
10: Manchester Jct
11: Deepwater Power Plant
12: Simpson Paper Mill
Ind trks
Ideal Cement Gifford-Hill
Ind trks
T Siding
North Jct
East Jct
West Jct
Myrtle
Pierce Jct
Almeda
Map TX-53
HOUSTON TERMINAL
Miles
Ind trk
Mykawa TOFC Facility
Mykawa
HD No.6
Ashland
PTRA
Manchester Yard
Elevator Storage Yard
American Yard
Clinton Docks
Harrisburg
Sheldon
Lynchburg Jct
Seabrook Jct
Ship Channel Jct
Greens Bayou
Twr 207
Twr 30
CP Tower 76 Robbins X-ing
CP 207 Twr 76 Robbins X-ing
Twr 71 Quitman St
Twr 210
Twr 88
Twr 85
Twr 208
Twr 30
Twr 76
Twr 71
p54
p58
TX-51
TX-53
TX-54
TX-57
351.3 mi
Bpd

MP13SR (7)

7 TRAINS PER WEEK

Map 6